

REMARKS/ARGUMENTS

This Amendment is being filed in response to the Non-Final Office Action mailed on September 15, 2008, which has been reviewed and carefully considered. Reconsideration and allowance of the application in view of the amendments made above and the remarks to follow are respectfully requested.

Claims 1-26 are pending. By means of the present amendment, claims 1-26 are amended for non-statutory reasons, including for better conformance to U.S. practice such as amending dependent claims to begin with "The" as opposed to "A" , as well as correcting certain informalities noted upon review of the claims. By these amendments, claims 1-26 are not amended to address issues of patentability and Applicants respectfully reserve all rights under the Doctrine of Equivalents. Applicants furthermore reserve the right to reintroduce subject matter deleted herein at a later time during the prosecution of this application or continuing applications.

Applicants thank the Examiner for acknowledging priority to an EPO patent application 03101893 filed on June 25, 2003. The Office Action notes that Applicants have not filed a certified copy of the

EPO application as required by 35 U.S.C. 119(b). However, it is respectfully submitted that Applicants are not required to file a certified copy of the EPO application, as the Examiner contends.

Indeed, 35 U.S.C. 119(b) is not applicable, because the current application is a 371 national stage application of PCT/IB04/50895 filed on June 14, 2005, which claims priority to the EPO application, and not a national application claiming priority to the EPO applications under 119(a). As such, the Applicants are not required to furnish a copy of the priority document under 35 U.S.C. 119(b). Moreover, pursuant to PCT Rule 17.2(b), where the priority document has been submitted within the time limit during the International phase to the receiving Office or to the International Bureau, no designated Office may require an original priority document (that is, an original certified copy of the earlier application) from the applicant, rather, the International Bureau shall, at the specific request of the designated Office, furnish a copy of the priority document to that Office. Therefore, for all the above reasons, it is respectfully asserted that Applicants are not required to file a certified copy of the EPO application. However, in the interest of expediting consideration

and allowance of the pending application and for the Examiner's convenience, a copy of the certified priority document, namely EP 03101893, from the International Bureau as previously submitted thereto is attached in Appendix A.

In the Office Action, the disclosure is objected to for not being in a "proper format". The Office Action further provides suggested guidelines of a preferred layout for the specification including section headings, and notes that appropriate correction is required. Although Applicants gratefully acknowledge the Examiner's suggestion, Applicants respectfully decline to add the headings since the section headings may be inappropriately utilized in interpreting the claimed subject matter and are not statutorily required for filing a non-provisional patent application, but per 37 CFR 1.77, are only guidelines that are suggested for Applicants' use. Accordingly, withdrawal of the objection to the specification is respectfully requested.

By means of the present amendment, the current Abstract has been deleted and substituted with the enclosed New Abstract which better conforms to U.S. practice.

In the Office Action, claims 14 and 18 are objected to for

informalities. In response, claims 12 and 14 are amended to place the claims in better dependent form. Further, claim 18 is amended to clarify the placement of the "mask", as suggested in the Office Action. Accordingly, withdrawal of the objection to claims 14 and 18 is respectfully requested.

In the Office Action, claims 22-26 are rejected under 35 U.S.C. 101 as allegedly directed to non-statutory matter. Applicants respectfully disagree with the rejection. For example, with regard to claim 22, although broad, the recitation "Use of a support . . . for the detection of ..." does in fact recite a process. However, in the interest of advancing prosecution, claims 22-26 are amended for better form and clarification with regard to the recitation of process acts. Accordingly, withdrawal of the rejection under 35 U.S.C. 101 is respectfully requested.

Claims 8, and 22-26 are rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite. In response, claim 8 is amended to depend from claim 7, claim 22 is amended to correct the typographical error, and claims 22-26 are amended (as noted above) for better form. Accordingly, withdrawal of the rejection of claims 8 and 22-26 under U.S.C. §112, second paragraph is

respectfully requested.

In the Office Action, claim 1 is rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. No. Patent 3,975,084 to Block ("Block"). Claims 1, 3-5, 7-9 and 11 are rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. 4,815,843 to Tiefenthaler ("Tiefenthaler"). Claim 2 is rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Tiefenthaler in view of U.S. Patent Publication No. 2002/0003623 to Tajima ("Tajima"). Claim 6 is rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Tiefenthaler in view of U.S. Patent No. 5,468,606 to Bogart ("Bogart"). Claim 10 is rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Tiefenthaler in view of U.S. Patent No. 5,994,150 to Challenger ("Challenger"). Claims 12-14, 16-17, 19 and 21 are rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Tajima in view of Tiefenthaler. Claim 15 is rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Tajima in view of Tiefenthaler and further in view of U.S. Patent No. 6,897,436 to Smolyaninov ("Smolyaninov"). Claim 18 is rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Tajima in view of Tiefenthaler and further in view of U.S. Patent

No. 5,939,709 to Ghislain ("Ghislain"). Claim 20 is rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Tajima in view of Tiefenthaler and further in view of Challener. It is respectfully submitted that claims 1-26 are allowable over Block alone, Tajima in view of Tiefenthaler and in view of any combination of Bogart, Challener, Smolyaninov and Ghislain for at least the following reasons.

Block generally discloses in FIG. 1 a particle detection system that comprises a light guide, or TIR cell (20), with opposing (top/bottom) surfaces (26), (27) that are planar and parallel to each other, and opposed (side) edges (28), (29) with beveled surfaces. The surfaces of side edges (28), (29) are beveled at angles with respect to critical angles that allow TIR (total internal reflection) (and formation of evanescent wave) at the interface between the top surface (26) and medium (30) when a light beam (24) enters one of the edges (28), (29) normal to the beveled edge surface, and propagates internally along the cell (20) via TIR (see, Col. 4, lines 42-62; and Col. 5, lines 52-68). As clear from Block, Block does not disclose or suggest surface structures comprising inclined surfaces on the surface of the

support structure.

Tiefenthaler shows in FIG. 2, an optical sensor that includes a wave guiding film (1) having a diffraction grating (4) and disposed on a substrate (2), wherein the sensor is used for selective detection of a specific substance contained in sample (3). The diffraction grating (4) is used for coupling a laser beam (7) into the waveguide structure (1, 2) which then propagates in the waveguide (1,2) as a guided light wave. The laser beam (7) is incident on the diffraction grating (4) with a well-defined angle of incidence  $W1$  at which maximum intensity of a guided mode (8) is obtained for propagating light in the waveguide film (1) via TIR (see, Abstract and Col. 6, lines 21-33).

Tajima shows in FIGS. 2, 3 and 4 a sample chip analyzing device having a waveguide plate (11) with planar top and bottom surfaces, wherein the waveguide plate (11) receives light from light source (7) at an end thereof, and the light is guided along the waveguide plate (11) via total internal reflection. A plurality of sampling probes (15) are placed on the surface of the waveguide plate (11) which contain samples that are to be marked with a fluorescent substance via an evanescent wave produced by TIR

at the planar surface of the waveguide plate. (See, paragraphs [0026] and [0030]).

It is respectfully submitted that the support of claim 1 is not anticipated or made obvious by the teachings of Block alone nor Tajima in view of Tiefenthaler. For example, it is respectfully submitted that neither Block alone nor Tajima in view of Tiefenthaler disclose or suggest, amongst other patentable elements, (illustrative emphasis provided) a "support comprising essentially parallel first and second surfaces, wherein at least one area on the first surface comprises surface structures that form evanescent-fields on the first surface of the support ... wherein the surface structures ... comprise inclined surfaces that are inclined with respect to a plane of the support by an angle within a range from 10° to 85°", as recited in claim 1 and as similarly recited in claim 22.

Indeed, although Block shows edges (28), (29) with surfaces that are inclined with respect to the plane of the cell (20), the edges are designed for I/O of the light beam (24), and not for reflecting light or otherwise forming evanescent fields.

Moreover, not only does Tiefenthaler fail to show a support



having a surface that is inclined with respect to the plane of the support, as acknowledged by the Examiner on paragraph 11 of the Office Action, there is nothing in Tiefenthaler that discloses or remotely suggests an inclined surface structure for forming an evanescent field, as claimed.

Furthermore, with regard to claim 12, in view of the above, it is respectfully submitted that the combination of Tajima and Tiefenthaler does not disclose or suggest a device for the detection of optically-active substances, which comprises, amongst other patentable elements, (illustrative emphasis provided): "a support having opposing first and second surfaces, wherein the first surface comprises inclined surface structures that form evanescent-fields on the first surface of the support by TIR (total internal reflection) of light," as recited in claim 12. Each of Bogart, Challenger, Smolyaninov and Ghislain are introduced for allegedly showing elements of the dependent claims and as such, do nothing to cure the deficiencies in Block alone nor Tajima in view of Tiefenthaler.

Based on the foregoing, the Applicants respectfully submit that independent claims 1, 12 and 22 are patentable over Block

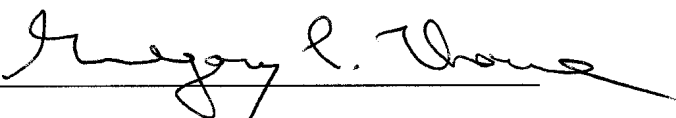
alone and Tajima in view of Tiefenthaler and notice to this effect is earnestly solicited. Claims 2-11, 13-21 and 23-26 respectively depend from one of claims 1, 12 and 22 and accordingly are allowable for at least this reason as well as for the separately patentable elements contained in each of the claims. Accordingly, separate consideration of each of the dependent claims is respectfully requested.

In addition, Applicants deny any statement, position or averment of the Examiner that is not specifically addressed by the foregoing argument and response. Any rejections and/or points of argument not addressed would appear to be moot in view of the presented remarks. However, the Applicants reserve the right to submit further arguments in support of the above stated position, should that become necessary. No arguments are waived and none of the Examiner's statements are conceded.

Amendment in Reply to Non-Final Office Action of September 15, 2008

In view of the above, it is respectfully submitted that the present application is in condition for allowance, and a Notice of Allowance is earnestly solicited.

Respectfully submitted,

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